What is claimed is:

1 1. A method of configuring communications over a network

2 comprising:

3   connecting a device to the network;

4   receiving data on the device from the network;

5   configuring the device for a communication mode,

6 from a plurality of possible communication modes, wherein the

7 communication mode includes transferring data between the

8 device and the network simultaneously in time;

9   transferring data between the device and the network

10 based on the communication mode; and

11   determining whether to retain the device in the

12 communication mode.

1 2. The method of claim 1 further comprising,

2   configuring the device for a communication mode,

3 wherein the communication mode includes transferring data

4 between the device and the network separately in time.

1 3. The method of claim 1, wherein communication mode further

2 comprises a full-duplex mode.

1 4. The method of claim 1, wherein the network comprises an

2 Ethernet network.

1 5. The method of claim 1, wherein the device comprises a

2 medium access controller.

1 6. The method of claim 1, wherein the device comprises a

2 switch.

1 7. The method of claim 1, wherein the device comprises a

2 hub.

1 8. The method of claim 1, wherein the device comprises an

2 Ethernet interface card.

1 9. The method of claim 1, wherein the device comprises a

2 computer.

1 10. The method of claim 1, wherein the device comprises an

2 Ethernet peripheral device.

1 11. An apparatus configured to connect to a network, the

2 apparatus comprising:

3   a memory which stores instructions to,

4   configure the apparatus for a communication

5 mode, from a plurality of possible communication modes,

6 wherein the communication mode includes transferring data

7 between the device and the network simultaneously in time,

8   transfer data between the apparatus and the

9 network based on the communication mode,

10   determine whether to retain the apparatus in

11   the communication mode; and

12   a processor which executes the instructions.

1   12.   The apparatus of claim 11, wherein the instructions

2   include configuring the apparatus for a communication mode,

3   wherein the communication mode includes transferring data

4   between the apparatus and the network separately in time.

1   13.   The apparatus of claim 11, wherein the instructions

2   include transferring data between the apparatus and the

3   network in a full-duplex mode.

1   14.   The apparatus of claim 11, wherein the network comprises

2   an Ethernet network.

1   15.   The apparatus of claim 11, wherein the apparatus is

2   incorporated into a medium access controller.

1   16.   The apparatus of claim 11, wherein the apparatus is

2   incorporated into a switch.

1   17.   The apparatus of claim 11, wherein the apparatus is

2   incorporated into a hub.

1   18.   The apparatus of claim 11, wherein the apparatus is

2   incorporated into an Ethernet interface card.

1   19.   The apparatus of claim 11, wherein the apparatus is

2   incorporated into a computer.

1   20.   The apparatus of claim 11, wherein the apparatus is

2   incorporated into an Ethernet peripheral device.

1   21.   An article comprising a machine-readable medium that

2   stores instructions that cause a machine to:

3   receive data from a connected network;

4   configure the machine for a communication mode, from

5   a plurality of possible communication modes, for transferring

6   data between the machine and the network, wherein the

7   communication mode includes transferring data between the

8   machine and the network simultaneously in time;

9   transfer data between the machine and the network

10   based on the determined communication mode; and

11   determine whether to retain the machine in the

12   communication mode.

1   22.   The machine-readable medium of claim 21, wherein the

2   instructions further cause the machine to determine a

3   communication mode, from the plurality of possible

4   communication modes, wherein the communication mode includes

5   transferring data between the machine and the network

6   separately in time.

1   23.   The machine-readable medium of claim 21, wherein the

2   instructions further cause the machine to determine a

3   communication mode, from the plurality of possible

4   communication modes, wherein the communication mode includes

5   transferring data between the machine and the network in a

6   full-duplex mode.

1   24.   The machine-readable medium of claim 21 is a random

2   access memory.

1   25.   The machine-readable medium of claim 21 is a read only

2   memory.

1   26.   The machine-readable medium of claim 21 is a hard disk

2   drive.